Application No.: 10/724,042 Examiner: Sam K. Ahn

Art Unit: 2611

LIST OF CURRENT CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the Application.

Claim 1 (Currently Amended): A spectrum measurement system for measuring a spectrum of a wireless communication device to be finished, comprising:

a preamplifier for receiving input signals from the wireless communication device to be measured and pre-amplifying the same input signals;

a down converter coupled to the preamplifier for decreasing a frequency frequencies of the amplified input signals to an IF amplified and generating corresponding intermediate frequency (IF) signals;

an IF filter coupled to the down converter for receiving the IF signals from generated by the down converter and filtering the same IF signals based on a predetermined frequency resolution and a predetermined center frequency;

a power meter coupled to the IF filter for measuring a power powers of the IF signals received from the IF filter; and

a personal computer (PC) coupled to the power meter via a first control interface, wherein the first control interface is operative to read the powers measured by the power meter and generate frequencies corresponding to the powers, and the PC being is operative to read the measured power frequencies received from the power meter first control interface, convert the read measured frequency frequencies received from the first control interface into [[a]] real frequency frequencies based on a created pre-established calibration table, take mark the real frequency as frequencies on a frequency axis and the power powers [[as]] on a power axis, and plot a frequency analysis graph with respect to the wireless communication device to be measured.

Claim 2 (Currently Amended): The spectrum measurement system of claim 1, further comprising: a scanning circuit coupled to the PC via a second control interface, the scanning circuit being operative to generate a predetermined waveform in response to a command from the PC; and

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a voltage control oscillator (VCO) coupled to the scanning circuit, wherein an

oscillation frequency of the VCO is controlled by a waveform sent from the scanning

circuit, the VCO is operative to generate a local oscillation frequency capable of being

linearly scanned back and forth in a predetermined frequency range, and the local

oscillation frequency is sent to the down converter for mixing with the IF signals.

Claim 3 (Currently Amended): The spectrum measurement system of claim 2,

wherein the pre-established calibration table is created by eoupling the measured the PC,

which is coupled to another wireless communication device selected from a series of

wireless communication devices having a bandwidth complied with [[the]] required

specifications to the spectrum measurement system, and activating the PC to refer the read

measured spectrum to a real spectrum of the wireless communication device in accordance

with the frequency of the another wireless communication device measured by the PC and

a known real frequency of the another wireless communication device.

Claim 4 (Currently Amended): The spectrum measurement system of claim 2,

wherein the spectrum measurement system is operative to measure the wireless

communication device by performing operations comprising:

commanding the PC to send a control signal to the scanning circuit via the second

control interface;

causing the scanning circuit to ereate generate a predetermined waveform for

controlling a local oscillation frequency generated by the VCO to be linearly scanned back

and forth [[in]] within the range of the predetermined frequency range;

pre-amplifying the input signals inputted from by the wireless communication

device at the preamplifier;

decreasing the frequency frequencies of the amplified input signals, which are

mixed with the local oscillation frequency generated by the VCO, at the down converter

for obtaining the IF signals;

filtering the IF signals by the IF filter to obtain a measured spectrum having the

predetermined frequency resolution and the predetermined center frequency;

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activating the power meter to measure the power of the IF signals; and activating the PC to read a plurality of measured frequencies and power values of the wireless communication device to be measured received from the first control interface.

Claim 5 (Currently Amended): The spectrum measurement system of claim 4, wherein the PC is operative to take mark the measured frequency as a frequencies received from the first control interface on the frequency axis and the power as a powers received from the first control interface on the power axis based on the read measured frequency and power for plotting [[a]] the frequency analysis graph of the wireless communication device, converting the measured frequency frequencies received from the first control interface into [[a]] the real frequency frequencies based on the pre-established calibration table, and plotting [[a]] the real frequency analysis graph of the wireless communication device to be measured by referring the frequency analysis graph to the calibration table in accordance with real frequencies.